

Blue lines indicate the area meeting the ISRA Criteria; dashed lines indicate the suggested buffer for use in the development of appropriate place-based conservation measures

ARAGUA ISRA

South American Atlantic Region

SUMMARY

Aragua is located on the coast of central Venezuela. The area is influenced by a coastal upwelling zone, with increased upwelling during the dry season from November-April. It is characterised by pelagic waters. Within this area there are: **threatened species** and **feeding areas** (Whale Shark *Rhincodon typus*).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C2 - Feeding Areas

| _ | - | | | | | |
|--------------|---|--|--|--|--|--|
| VENEZUELA | | | | | | |
| _ | - | | | | | |
| 0-600 metres | | | | | | |
| - | - | | | | | |
| 161 km² | | | | | | |
| - | - | | | | | |
| | | | | | | |



DESCRIPTION OF HABITAT

Aragua is located on the central coast of Venezuela. The area has the narrowest continental shelf in northern South America and is influenced by wind-driven coastal upwelling in the region (Muller-Karger & Castro 1994). The main upwelling zones are east and west of the area, but baitfish biomass is high in the area (Cobarrubia-Russo et al. 2024). This may be explained by the temporal lag from primary productivity to zooplankton to baitfishes (Plourde & Runge 1993). The area is also a known feeding area for cetaceans, billfishes, and seabirds (Cobarrubia-Russo et al. 2024; L Sánchez pers. obs. 2025), underlining its high productivity. Upwelling is strongest in November-April (Rueda-Roa & Muller-Karger 2013). The two climatic seasons are dry (November-April), corresponding with increased upwelling, and wet (May-October) (Novoa et al. 1998). Sea surface temperature varies between ~24-28 °C (Rueda-Roa & Muller-Karger 2013). The habitat is characterised by pelagic waters and the coast has rocky cliffs and sandy beaches (Cobarrubia-Russo et al. 2024).

This Important Shark and Ray Area is pelagic and is delineated from surface waters (O m) to 600 m based on the bathymetry of the area.

ISRA CRITERIA

CRITERION A - VULNERABILITY

One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occurs in the area. This is the Endangered Whale Shark (Pierce & Norman 2016).

SUB-CRITERION C2 - FEEDING AREAS

Aragua is an important feeding area for one shark species.

Whale Sharks are regularly observed in this area feeding on bait balls in association with tuna (Sánchez et al. 2020; Cobarrubia-Russo et al. 2024). In 2019-2020, a study conducting 30 boat-based visual transects (30 km long) parallel to the coast off Aragua, in the west of the area, recorded 87 sightings of feeding Whale Sharks (Cobarrubia-Russo et al. 2024). Almost all sightings (~98%) were made within this area. Further, opportunistic observations made between 2022-2024 recorded 75 Whale Sharks in the western part of the area (L Sánchez unpubl. data 2025). Although most observations were of single Whale Sharks, there were five instances with two, and one instance with three individuals feeding on the same bait ball (L Sánchez unpubl. data 2025). Citizen science observations in the east of the area recorded 52 observations of Whale Sharks between 2018-2024 (L Sánchez unpubl. data 2025). Although behaviour is not consistently recorded, photos and videos show that they are often feeding on bait balls. The main baitfish species in Aragua is the Shortfinger Anchovie Anchoa lyolepis (Cobarrubia-Russo et al. 2024). Whale Sharks are recorded throughout the year, but most sightings (71%) from the survey and citizen science reports are made between October-March, when upwelling is strongest. Whale Sharks are also recorded further east of the area along the central Venezuela coast, but the main hotspot of feeding individuals is in this area (L Sánchez unpubl. data 2025).

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QUALIFYING SPECIES

| Scientific Name | Common Name | IUCN Red List Category | Global Depth Range (m) | ISRA Criteria/Sub-criteria Met | | | | | | | | |
|-----------------|-------------|---------------------------|------------------------------|--------------------------------|---|----|----|----|----|----|----|----|
| | | | | Α | В | C1 | C2 | C3 | C4 | C5 | Dı | D2 |
| SHARKS | | | | | | | | | | | | |
| Rhincodon typus | Whale Shark | EN | 0-1,928 | Х | | | Х | | | | | |

IUCN Red List of Threatened Species Categories are available by searching species names at <u>www.iucnredlist.org</u> Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.



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